

CalRecycle Staff Report

Anaerobic Digestion Initiative and Statewide Anaerobic Digester Facilities For The Treatment of Municipal Organic Solid Waste

June 21, 2011

Anaerobic Digestion Initiative

Under its Strategic Directive 6.1, CalRecycle seeks to reduce by 50 percent the amount of organic waste disposed in the state's landfills by 2020. In addition to helping conserve limited landfill capacity, this CalRecycle policy recognizes that organic wastes are a resource, not just solid wastes that must be disposed. Organic wastes have an energy value that can be captured and utilized and are also a necessary component of compost, soil amendments, and other useful products. Directive 6.1 also encompasses one of CalRecycle's actions to help California significantly reduce its generation of greenhouse gases that contribute to global warming. Under the State's "Climate Change Scoping Plan, a Framework for Change" (California Air Resources Board, December 2008), CalRecycle is responsible for taking actions to reduce the emission of methane, a potent greenhouse gas, from landfills. Anaerobic digestion facilities utilize organic wastes as a feedstock from which to produce biogas (which is captured), and the methane in the biogas is converted to other forms of energy, such as liquid natural gas and compressed natural gas. The development of such facilities is one of CalRecycle's charges under the AB 32 Climate Change Scoping Plan. The plan anticipates that anaerobic digestion facilities can reduce landfill methane emissions by 2 million metric tons of equivalent gases per year by the year 2020. Anaerobic digestion also can contribute to meeting the State's Renewable Portfolio Standard and Low Carbon Fuel Standard. To assist in achieving those objectives, CalRecycle intends to adopt the Anaerobic Digestion Initiative, a comprehensive program to foster the development of anaerobic digestion facilities which convert organic solid wastes into sources of energy and can produce valuable compost feedstocks, soil amendments, and other products.

The Anaerobic Digestion Initiative consists of CalRecycle's adoption of a policy and a series of discrete actions to implement the policy, together with additional actions that will be developed and implemented in the future:

- It is the policy of CalRecycle to encourage the development of anaerobic digestion facilities in California as an alternative to the landfill disposal of organic solid waste. Specifically, as an initial measure, CalRecycle will encourage the establishment of in-vessel digesters located at existing or new solid waste facilities and in areas zoned for industrial or solid waste handling activities.
- CalRecycle shall, not later than January 1, 2012, establish programs to implement the above policy, including without limitation:
 - Provide research grants, loans, and contracts (dependent on funding availability) to develop anaerobic digestion facilities and for activities that advance the state of knowledge about anaerobic digestion and its applications and the uses of products and by-products, including anaerobic digestion demonstration projects that use the organic fraction of municipal solid waste as a feedstock

- Develop guidance publications to assist operators who seek to establish anaerobic digestion facilities
- Develop guidance publications to assist LEAs and other local and regional government agencies that permit and regulate anaerobic digestion facilities, specifically guidance for co-location at solid waste facilities.
- Draft revised regulations for aspects of specific design, operation and permitting of anaerobic digestion facilities within the authority and responsibility of CalRecycle
- Promote anaerobic digestion through CalRecycle's participation with the California Energy Commission in implementing AB 118 (Alternative and Renewable Fuel and Vehicle Technology Program), the Bioenergy Interagency Working Group, and with the Air Resources Board in implementing the Anaerobic Digestion and Low Carbon Fuel Standard measures in the AB 32 Climate Change Scoping Plan.
- Work with the California Pollution Control Financing Authority and California Alternative Energy and Advanced Transportation Financing Authority to help anaerobic digestion project proposals obtain funding
- Participate on technical workgroups convened by the Climate Action Reserve to develop or modify protocols, such as the Organic Waste Digestion Project Protocol, for projects that divert and anaerobically digest organic waste that otherwise would have gone to solid waste landfills

CEQA Compliance

The proposed adoption of the Anaerobic Digestion Initiative is a “project” that has potential environmental effects that must be evaluated under the California Environmental Quality Act (CEQA). CalRecycle has prepared a Program Environmental Impact Report for the Anaerobic Digestion Initiative.

The California Integrated Waste Management Board (now CalRecycle) awarded a \$250,000 contract to Environmental Science Associates (ESA) in 2009 to assist in the preparation and circulation of a Program Environmental Impact Report (EIR) to assess the environmental impacts for anaerobic digestion (AD) in California.

A technical advisory group (TAG) was formed to help identify the potential environmental impacts to be considered in the Program EIR, the types of anaerobic projects being considered statewide, and the regulatory, technological and economic barriers to implementing potential AD projects. Over 55 stakeholders participated in the three TAG meetings held in 2010.

A Notice of Preparation (NOP) was prepared and filed with the State Clearinghouse on April 30, 2010. The NOP provided responsible and trustee agencies and the public with information describing the project and its potential environmental effects. Nine written comment letters were received during the 30 day public comment period.

A draft Program EIR document consistent with CEQA statutes and guidelines was developed in February 2011. The Draft Program EIR assessed the potential environmental effects that may

result from the adoption of an Anaerobic Digestion Initiative and subsequent development of AD facilities in California. The Draft Program EIR examined the following potentially significant environmental impacts: *Air Quality and Greenhouse Gas, Hydrology and Water Quality, Noise, Public Services and Utilities, Transportation, Aesthetics, Hazards and Hazardous Materials, and Other CEQA Considerations* (such as Cumulative and Growth-Inducing Impacts, Significant and Unavoidable Environmental Impacts, etc.). The Draft Program EIR also examined Alternatives to the AD Initiative: *Alternatives that Were Considered but Not Further Analyzed* (Bioreactor Landfill, Thermal Conversion, Source Reduction) and *Alternatives Selected for Further Consideration* (No Project, Co-Digestion at Wastewater Treatment Plants, Co-Digestion and Dairy Manure Digesters, Increased Aerobic Composting, and Landfill In-Ground Digester Cell).

The Draft Program EIR was circulated for comment on February 11, 2011 through April 4, 2011. Comments were also accepted at the CalRecycle Monthly Public Meeting on March 15, 2011 in Sacramento and on March 30, 2011 in Lakewood. CalRecycle received 19 comment letters/emails on the Draft Program EIR. The comments and responses to comments have been incorporated into the Draft Program EIR to form a Final Program EIR.

CEQA Findings

As required by CEQA, CalRecycle has made specific findings regarding the environmental effects of the project. Those findings are presented below, along with facts and evidence to support each finding.

CalRecycle has prepared a Final Program Environmental Impact Report (EIR) for the proposed Anaerobic Digestion Initiative (the “proposed project”). The Final Program EIR is comprised of two documents. These documents are identified below:

1. Draft Program EIR, Statewide Anaerobic Digester Facilities for the Treatment of Municipal Organic Solid Waste, February 2011 (Revised June 2011) (State Clearinghouse Number 2010042100); and
2. Comments and Responses Document (June 2011)

These documents were prepared as a consolidated report that was released to the public on June 10, 2011 on the CalRecycle website. The Final Program EIR documents described above can be reviewed on-line at:

<http://www.calrecycle.ca.gov/swfacilities/Compostables/AnaerobicDig/default.htm>

Or reviewed at:

CalEPA Building, 2nd Floor
1001 I Street
P.O. Box 2815
Sacramento, CA
95812-2815
Phone: (916) 322-4027

For access to any additional background materials related to the Program EIR, please contact Ken Decio at (916) 341-6313 or Ken.Decio@CalRecycle.ca.gov

This information is provided in compliance with Public Resources Code Section 21081.6(a) (2).

Certification of EIR

Before adopting the Anaerobic Digestion Initiative, CalRecycle must certify the Final Program EIR. CalRecycle has completed the Final Program EIR in compliance with CEQA. (CEQA Guidelines, Section 15090[a][1]) The Final Program EIR reflects CalRecycle's independent judgment and analysis. (CEQA Guidelines, Section 15090[a][3]) The Final Program EIR will be presented to the Acting Director of CalRecycle, who will review and consider the information in it prior to adopting the Anaerobic Digestion Initiative. (CEQA Guidelines, Section 15090[a][2]) CalRecycle staff recommends that the Acting Director of CalRecycle make these findings and certify the Final Program EIR.

Reduce or Avoid Potentially Significant Impacts

Under the CEQA Guidelines, public agencies are required to make written findings for each significant effect associated with a project prior to approval of the project. The possible findings are:

- Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (CEQA Guidelines, Section 15091[a][1])
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CEQA Guidelines, Section 15091[a][2])
- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR. (CEQA Guidelines, Section 15091[a][3])

Each of these findings must be supported by substantial evidence in the record. In this case the evidence is embedded in the Final Program EIR.

CalRecycle finds that the proposed AD Initiative will have potentially significant impacts, as identified in the Final Program EIR (Table 1-1 Revised) but which can be mitigated to less than significant. Those impacts will occur only upon the construction and operation of specific anaerobic digestion facilities, if and when that occurs. Table 1-1 Revised specifies mitigation measures (that is, "changes or alterations" required in the project to avoid or substantially lessen each significant environmental effect) which will have the desired effect of avoiding or substantially lessening the potentially significant impacts identified in the Final Program EIR. When an anaerobic digestion facility is constructed in the future, it will be subject to numerous governmental approvals, primarily at the local level, and will be a "project" subject to CEQA. In most cases, the Lead Agency will be the local land use authority or the Local Enforcement Agency (LEA). In considering a specific anaerobic digestion facility, and based on site-specific conditions and circumstances, the Lead Agency will adopt the appropriate mitigation measures among those specified in the Final Program EIR and others as necessary to avoid or substantially lessen the significant environmental effects of the project. Therefore, with respect to CalRecycle

in its certification of this Final Program EIR and adoption of this project, the Anaerobic Digestion Initiative, all of the changes or alterations (i.e., Final Program EIR Mitigation Measures) to specific projects which are constructed and operated in the future will be within the responsibility and jurisdiction of other public agencies and not CalRecycle. In its concurrence/objection role, set out in Public Resources Code, Section 44009, CalRecycle does not have the authority to impose conditions on, or “changes or alterations” to, the anaerobic digestion facilities that local Lead Agencies will consider in the future. Such changes and alterations should be adopted by the local Lead Agencies for specific projects (CEQA Guidelines, Section 15091[a][2]). These mitigation measures will be fully enforceable through permit conditions to be imposed by the Lead Agency and other Responsible Agencies, agreements with project proponents, and similar means.

Mitigation Monitoring and Reporting Plan

CalRecycle staff has prepared, and recommends that the Acting Director adopt, the Mitigation Monitoring and Reporting Plan (MMRP) prepared in conjunction with the Final Program EIR. A copy is available at this website:

<http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=455&aiid=438>

The mitigation measures specified in the MMRP are fully enforceable through permit conditions to be imposed by the Lead Agency and other Responsible Agencies, agreements with project proponents, and similar means.

Custodian of Records

The record of CalRecycle’s proceedings in certifying the Final Program EIR and adopting the Anaerobic Digestion Initiative is maintained by CalRecycle’s custodian of records: Ms. Dona Sturgess, Legal Office, Department of Resources Recycling and Recovery, 1001 I Street, P.O. Box 4025, Sacramento, CA 95812-4025.

Staff Recommendations

Staff recommends the Acting Director certify the Final Program EIR, adopt the above findings respecting the avoidance or lessening of significant environmental effects, adopt the Mitigation Monitoring and Reporting Plan, and adopt the Anaerobic Digestion Initiative.